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09/653,039	09/01/2000	David J. Pawson	50277-1533	6577

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EXAMINER	
OSMAN, RAMY M	
ART UNIT	**PAPER NUMBER**
2157	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/653,039	PAWSON, DAVID J.	
	Examiner	Art Unit	
	Ramy M Osman	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. This communication is responsive to the amendment filed on October 12, 2004. Applicant amended claims 10,16,17,23,24,31,32,36,49 and 50. No claims were cancelled or added. Claims 1-52 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,2,3,8-14,18,19,21-29,34-40,44,45 and 47-52 rejected under 35 U.S.C. 103(a) as being unpatentable over Downing et al. (U.S. Patent No. 6,373,855) in view of Voois et al (U.S. Patent No. 6,404,776).

4. In reference to claims 1 and 27, Downing teaches a method and a computer readable medium for delivering digital video from a server to a client, comprising the steps of:

transmitting one or more digital streams to said client, said one or more digital streams comprising at least a portion of video and audio information, wherein transmitting said one or more digital streams consumes bandwidth between said server and said client (Abstract, column 1 lines 10-30 and column 3 lines 14-21 & 35-50, Downing teaches sending audio/video from

server to client over a network consuming bandwidth, where video bandwidth is based upon the quality of audio);

Downing teaches using bandwidth that would otherwise have been used to send said audio information to said client to send other information to said client (Summary and column 3 lines 14-21 & 35-50, Downing discloses allocating extra bandwidth to video based upon audio bandwidth).

Downing fails to explicitly teach wherein a signal is received indicating that audio information is not to be sent to said client; and in response to said signal, said server ceasing transmission of said audio information to said client. However, Voois teaches variable transmission rates (see Summary). Voois discloses disabling an audio channel in a transmission so that bandwidth is freed up for video bandwidth (column 8 lines 55-65).

It would have been obvious for one of ordinary skill in the art to modify Downing to allow for a signal to be received indicating that audio information is not to be sent to said client; and in response to said signal, said server ceasing transmission of said audio information to said client as per the teachings of Voois. One would be motivated to do so since available bandwidth can then be allocated to video thus allowing for higher quality video transmission to the client.

5. In reference to claims 2 and 28, Downing teaches a method and computer readable medium of claims 1 and 27 respectively, wherein the step of using at least some of the bandwidth to send other information includes sending video information that has a higher quality than the video information sent prior to receiving said signal (column 4 lines 35-67).

6. In reference to claims 3 and 29, Downing teaches a method and computer readable medium of claims 2 and 28 respectively, wherein said step sending video information that has a

higher quality than the video information sent prior to receiving said signal includes sending video frames at an increased frequency to said client (column 4 lines 35-67, Downing discloses increasing bits per second carrying video information).

7. In reference to claims 8 and 34, Downing teaches method and computer readable medium of claims 1 and 27 respectively, wherein audio and video information are transmitted to said client in a single digital stream (column 1 lines 10-30 and column 3 lines 14-20 & 35-50).

8. In reference to claims 9 and 35, Downing teaches method and computer readable medium of claims 1 and 27 respectively, wherein audio and video information are transmitted to said client in different digital streams (column 3 lines 49-67).

9. In reference to claims 10 and 36, Downing teaches a method and a computer readable medium for delivering digital video from a server to a client, comprising the steps of:

transmitting one or more digital streams to said client, said one or more digital streams comprising a plurality of types of information, wherein transmitting said one or more digital streams consumes bandwidth between said server and said client (Abstract, column 1 lines 10-30 and column 3 lines 14-21 & 35-50, Downing teaches sending audio/video from server to client over a network consuming bandwidth, where video bandwidth is based upon the quality of audio);

Downing teaches using bandwidth that would otherwise have been used to transmit said particular type of information to said client to transmit other information to one or more clients in a set of clients that includes said client (Summary and column 3 lines 14-21 & 35-50, Downing discloses allocating extra bandwidth to video based upon audio bandwidth).

Downing fails to explicitly teach wherein a signal is received that requests a change that would reduce the bandwidth requirements of a particular type of information of said plurality of types of information, said signal requesting cessation of transmission of said particular type of information; and in response to said signal, stopping the transmission of said particular type of information to said client. However, Voois teaches variable transmission rates (see Summary). Voois discloses disabling an audio channel in a transmission so that bandwidth is freed up for video bandwidth (column 8 lines 55-65).

It would have been obvious for one of ordinary skill in the art to modify Downing to allow for a signal to be received indicating that audio information is not to be sent to said client; and in response to said signal, said server ceasing transmission of said audio information to said client as per the teachings of Voois. One would be motivated to do so since available bandwidth can then be allocated to video thus allowing for higher quality video transmission to the client.

10. In reference to claims 11 and 37, Downing teaches a method and computer readable medium of claims 10 and 36 respectively, wherein the plurality of types of information includes a desired type of information and step of using at least some of the bandwidth to send other information includes sending said desired type of information that has a higher quality than the desired type of information sent prior to receiving said signal (column 4 lines 35-67).

11. In reference to claims 12 and 38, Downing teaches a method and computer readable medium of claims 10 and 36 respectively, wherein the plurality of types of information does not include a desired type of information and step of using at least some of the bandwidth to send other information includes sending said desired type of information (column 4 lines 35-67).

12. In reference to claims 13 and 39, Downing teaches a method and computer readable medium of claims 11 and 37 respectively, wherein the step of using at least some of the bandwidth to send other information includes sending video information that has a higher quality than the video information sent prior to receiving said signal (column 4 lines 35-67).

13. In reference to claims 14 and 40, Downing teaches a method and computer readable medium of claims 13 and 39 respectively, wherein said step sending video information that has a higher quality than the video information sent prior to receiving said signal includes sending video frames at an increased frequency to said client (column 4 lines 35-67, Downing discloses increasing bits per second carrying video information).

14. In reference to claims 18 and 44, Downing teaches a method and computer readable medium of claims 11 and 37 respectively, wherein said step of sending desired information that has a higher quality than the desired information sent prior to receiving said signal includes sending enhanced audio information (column 4 lines 20-34).

15. In reference to claims 19 and 45, Downing teaches a method and computer readable medium of claims 18 and 44 respectively, wherein said step of sending enhanced audio information is accomplished by sending audio information that is recorded at a higher sampling rate (column 5 lines 31-33).

16. In reference to claims 21 and 47, Downing teaches a method and computer readable medium of claims 10 and 36 respectively, wherein said plurality of types of information are transmitted to said client in a single digital stream (column 1 lines 10-30 and column 3 lines 14-20 & 35-50).

17. In reference to claims 22 and 48, Downing teaches method and computer readable medium of claims 10 and 36 respectively, wherein said plurality of types of information are transmitted to said client in different digital streams (column 3 lines 49-67).

18. In reference to claims 23 and 49, Downing teaches method and computer readable medium of claims 22 and 48 respectively, wherein said particular type of information is audio information (column 3 lines 14-21 & 36-50).

19. In reference to claims 24 and 50, Downing teaches method and computer readable medium of claims 10 and 36 respectively, wherein said particular type of information is audio information (column 3 lines 14-21 & 36-50).

20. In reference to claims 25 and 51, Downing teaches method and computer readable medium of claims 10 and 36 respectively, wherein said other information is sent only to said client(column 3 lines 36-60).

21. In reference to claims 26 and 52, Downing teaches method and computer readable medium of claims 10 and 36 respectively, wherein said other information is sent only to at least one client other than said client(column 3 lines 36-60).

22. Claims 4-6,15-17,30-32 and 41-43 rejected under 35 U.S.C. 103(a) as being unpatentable over Downing et al. (U.S. Patent No. 6,373,855) in view of Voois et al (U.S. Patent No. 6,404,776) in further view of Wine et al. (U.S. Patent No. 6,477,201).

23. In reference to claims 4-6, Downing teaches the method of claim 2 above. Downing fails to explicitly teach wherein the step of sending video information that has a higher quality than

the video information sent prior to receiving said signal includes sending video information that has increased color depth, increased pixel density and/or improved quantization than the video information sent prior to receiving said signal. However, Wine teaches selective video enhancements by improving parameters like color depth, resolution and quantization levels (Summary and column 4 line 52 – column 5 line 20).

It would have been obvious for one of ordinary skill in the art to modify Downing to improve the video quality by improving parameters like color depth, resolution and quantization levels as per the teachings of Wine so as to provide selectively enhanced video properties to users.

24. In reference to claims 15-17, Downing teaches the method of claim 13 above. Downing fails to explicitly teach wherein the step of sending video information that has a higher quality than the video information sent prior to receiving said signal includes sending video information that has increased color depth, increased pixel density and/or improved quantization than the video information sent prior to receiving said signal. However, Wine teaches selective video enhancements by improving parameters like color depth, resolution and quantization levels (Summary and column 4 line 52 – column 5 line 20).

It would have been obvious for one of ordinary skill in the art to modify Downing to improve the video quality by improving parameters like color depth, resolution and quantization levels as per the teachings of Wine so as to provide selectively enhanced video properties to users.

25. In reference to claims 30-32, Downing teaches the computer readable medium of claim 28 above. Downing fails to explicitly teach wherein the step of sending video information that

has a higher quality than the video information sent prior to receiving said signal includes sending video information that has increased color depth, increased pixel density and/or improved quantization than the video information sent prior to receiving said signal. However, Wine teaches selective video enhancements by improving parameters like color depth, resolution and quantization levels (Summary and column 4 line 52 – column 5 line 20).

It would have been obvious for one of ordinary skill in the art to modify Downing to improve the video quality by improving parameters like color depth, resolution and quantization levels as per the teachings of Wine so as to provide selectively enhanced video properties to users.

26. In reference to claims 41-13, Downing teaches the computer readable medium of claim 39 above. Downing fails to explicitly teach wherein the step of sending video information that has a higher quality than the video information sent prior to receiving said signal includes sending video information that has increased color depth, increased pixel density and/or improved quantization than the video information sent prior to receiving said signal. However, Wine teaches selective video enhancements by improving parameters like color depth, resolution and quantization levels (Summary and column 4 line 52 – column 5 line 20).

It would have been obvious for one of ordinary skill in the art to modify Downing to improve the video quality by improving parameters like color depth, resolution and quantization levels as per the teachings of Wine so as to provide selectively enhanced video properties to users.

27. Claims 7,20,33 and 46 rejected under 35 U.S.C. 103(a) as being unpatentable over Downing et al. (U.S. Patent No. 6,373,855) in view of Voois et al (U.S. Patent No. 6,404,776) in further view of Forler (U.S. Patent No. 5,327,176).

28. In reference to claims 7 and 33, Downing teaches the method and computer readable medium of claims 1 and 27 respectively. Downing fails to explicitly teach wherein step of using at least some bandwidth to send other information includes sending closed- captioned information to said client. However, Forler teaches sending closed caption information when audio information is designated not to be sent (i.e. muted) (Summary, column 1 lines 35-60 and column 3 lines 50-67).

It would have been obvious for one of ordinary skill in the art to modify Downing to sending closed caption information when audio information is designated not to be sent as per the teachings of Forler so that spoken information can be viewed textually when there is no audio.

29. In reference to claims 20 and 46, Downing teaches the method and computer readable medium of claims 12 and 38 respectively. Downing fails to explicitly teach wherein step of using at least some bandwidth to send other information includes sending closed- captioned information to said client. However, Forler teaches sending closed caption information when audio information is designated not to be sent (i.e. muted) (Summary, column 1 lines 35-60 and column 3 lines 50-67).

It would have been obvious for one of ordinary skill in the art to modify Downing to sending closed caption information when audio information is designated not to be sent as per the teachings of Forler so that spoken information can be viewed textually when there is no audio.

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Patent No US005617145A, Huang et al teaches bit allocation for audio/video transmissions.
- Patent No US005467139A, Lankford teaches muting audio signal in audio/video transmission.
- Patent No US005231492A, Dangi et al teaches audio/video multiplexing.
- Patent No US006075768A, Mishra teaches adjusting video quality based on network load conditions.

Response to Amendment

31. Examiner acknowledges the amendment filed on 10/12/2004. Applicant amended claims 10,16,17,23,24,31,32,36,49 and 50. No claims were cancelled or added.

Response to Arguments

32. Applicant's arguments with respect to claims 1-52 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO
March 5, 2005

SALEH NAJJAR
PRIMARY EXAMINER